

State of California

Public Utilities Commission
San Francisco

M E M O R A N D U M

Date : April 3, 2014

**To : The Commission
(Meeting of April 10, 2014)**

**From : Noel Obiora, Legal Division
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**Subject : NERC's Project 2014-04 Physical Security to be subsequently
filed in FERC Docket No. RD14-6-000**

RECOMMENDATION: Staff requests Commission authorization to participate in NERC's Project 2014-04 Physical Security and to file comments.

INTRODUCTION:

On March 7, 2014, the Federal Energy Regulatory Commission (FERC) issued an order pursuant to Section 215 of the Federal Power Act (FPA) directing the North American Electric Reliability Corporation (NERC) to submit for approval, Reliability Standards (RS) that would "require certain registered entities to take steps or demonstrate that they have taken steps to address physical security risks and vulnerabilities related to the reliable operation of the Bulk-Power System." (Order Directing Filing of Standards, p. 1.)

The Order required NERC to establish RS that require the registered entities to take the following steps: 1) Identify the facilities that are critical to the Bulk-Power System, which the Order referred to as "critical facilities"; 2) once identified, require owners and operators of the critical facilities to evaluate the potential threats to, and vulnerabilities of, those facilities; 3) require owners and operators of critical facilities to develop and implement a security plan designed to protect the critical facilities.

FERC's Order Directing Filing of Standards required NERC to submit the proposed RS for approval by FERC within 90 days of the issuance of the Order

and NERC has opened a proceeding titled NERC Project 2014-04 Physical Security to develop the RS as directed by FERC.

Staff seeks authorization to participate in all stages of NERC Project 2014-04 Physical Security proceeding, including filing comments on the initial draft RS. Staff cannot now take a specific position on the issues outlined in FERC's Order Directing Filing of Standards because the order is too broad and NERC has not yet issued an initial draft of its proposed RS. However, Staff expects the draft RS would raise certain policy issues that the California Public Utilities Commission (CPUC) has always defended in the interest of the State of California. Therefore, Staff seeks Commission approval to submit comments consistent with those policies as discussed below and otherwise participate in NERC's Project 2014-04 Physical Security on terms consistent with the protection of the interests of the State of California.

BACKGROUND:

FERC is concerned that current Reliability Standards do not adequately protect the Bulk-Power System from physical attacks that could result in instability, uncontrolled separation, or cascading failures. These concerns are based on the fact that FERC believes existing RS do not specifically require entities to take steps to reasonably protect the Bulk-Power System from such physical security attacks¹.

Therefore, FERC exercised its authority under Section 215 of the FPA and ordered NERC to develop and file for approval proposed RS that addresses threats and vulnerabilities to the physical security of critical facilities on the Bulk-Power System. Section 215 of the FPA authorizes FERC to certify an Electric Reliability Organization (ERO) to develop and enforce mandatory reliability standards for FERC review and approval. Specifically, Section 215(d)(5) of the FPA gives FERC the authority, upon its own order or complaint of a party, to direct an ERO to submit to FERC a proposed RS or to modify existing RS that addresses a specific matter FERC considers appropriate to carry out its duties.

Consistent with these provisions, FERC issued the Order Directing Filing Standards upon its own motion and ordered NERC to develop RS that would require certain registered entities to identify critical facilities within their operating jurisdictions, evaluate the potential threats to, and vulnerabilities of, these critical facilities and devise security plans to protect these critical facilities.

¹ Order Directing Filing of Standards, p. 2.

DISCUSSION:

Once the proposed RS is released staff comments will become much clearer and more specific. However, based on its review of FERC's Order Directing Filing Standards, staff is of the view that it should file comments along the following policy points:

Identifying Critical Facilities: North America's Bulk Power System consists of over 400,000 circuit miles of transmission and about 55,000 transmission substations². To ensure that the size of the system does not cause entities to overstate what constitutes "critical facilities", FERC specifically defined that term.

A critical facility is one that, if rendered inoperable or damaged, could have a critical impact on the operation of the interconnection through instability, uncontrolled separation or cascading failures on the Bulk-Power System.

(Order Directing Filing Standards, p. 3.)

There are risks in both overstating and understating the number of facilities that constitute critical facilities within a service area. As FERC Commissioner Norris noted in his concurrence to the Order, overstating the number of facilities could be costly to ratepayers as owners and operators spend billions of dollars to protect the infrastructure and then pass on these costs to ratepayers³. Staff stresses that safety, security and reliability of the grid should always be the overriding concern, and that aside from excess costs to ratepayers, overstating the number of Bulk-power system critical facilities may cause expenses to be inappropriately diverted from other important safety and reliability projects unrelated to the interconnected Bulk-power system. Alternatively, the risk in understating the number of facilities is the very concern about the reliability and resilience of the Bulk-Power System that the Order is trying to address.

Staff's primary goal is ensuring the interests of California ratepayers are not negatively affected by any requirements in the RS. While staff does not now expect that California's investor owned utilities (IOUs) would overstate or understate the number of critical facilities, the RS would cover contiguous states and facilities from which the state imports power. Therefore, it is in the interest of the state that the RS developed establishes the appropriate criteria to ensure that those regions do not overstate or understate the number of their facilities that are critical to the Bulk-Power System. Additionally the RS should ensure that all

² Order Directing Filing Standards, Concurrence of FERC Commissioner John R. Norris, p. 3.

³ Id.

neighboring entities on the grid, such as balancing authorities (BAs), transmission owners or generation owners share adequate information to make these important evaluations.

Evaluating the Potential Threats and Vulnerabilities: The range of physical threats and vulnerabilities the RS would address vary considerably “based on factors such as location, size, function, existing protection and attractiveness as a target”⁴. It is highly unlikely that the utilities, the CPUC, other Commissions and System Operators have not taken steps already to address some of the very physical threats and vulnerabilities that the Order requires of the owners and operators of critical facilities. While some redundancy may be necessary in some respect to give separate entities oversight of these facilities, other duplication of effort would not be cost effective. To reduce such duplication, the Order directed NERC to require that owners and operators focus their evaluation on the characteristics that make the critical facilities unique and the type of attacks that can realistically be contemplated. Staff realizes that no RS should be overly prescriptive, given the unique characteristics of electrical facilities, and that too vague of a standard may difficult to implement by those charged with enforcement unless they are also involved the evaluation that reduces the directive to a standard.

NERC should also consider in the standards development process requiring owners and operators to consult with entities with appropriate expertise as part of this evaluation process.

(Order Directing Filing of Standards, p. 4.)

Develop and Implement a Security Plan: A plan to protect critical facilities from attacks that can realistically be contemplated is easier said than done. Staff sees the primary problem in each of the steps set forth in the Order as one of reducing the directive to an implementable and effective standard. Only through proactive participation in the process that develops the standard, with opportunities for exchanges of information with other parties and stakeholders, can this be achieved. This step more than the first two steps in the Order require a balancing of costs with the perceived threat as well as a consideration of alternatives for protecting the critical facility. While no security plan is perfect, security planners should also consider the feasibility of repair and the time to recover from an attack should the security plan fail, as well as the level of redundancy in the grid, and protective schemes in place to prevent cascading outages. FERC’s directive in the Order noted that the RS need not dictate what steps the owners and operators may take to protect the critical facilities, but rather ensure that they have a plan in place

⁴ Order Directing Filing Standards, p. 4.

for doing so. Staff is convinced that the more ideas are offered to NERC from various parties with different expertise, the better the proposed RS would be.

CONCLUSION

NERC's proposed initial draft of the proposed RS is scheduled to be issued on April 7, 2014, with comments thereon, due on April 22, 2014. The final proposed RS must be submitted to FERC by June 5, 2014.

WHEREFORE, staff requests permission to file comments at NERC on the draft proposed RS when issued and otherwise to participate in NERC's Project 2014-04 Physical Security in the FERC proceeding.